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09/606,939	06/30/2000	Takahiro Kimura	Q59907	8452

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EXAMINER

FISCHER, JUSTIN R

ART UNIT

PAPER NUMBER

1733

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/606,939	Applicant(s) KIMURA ET AL.	
	Examiner Justin R Fischer	Art Unit 1733	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2,4</u> | 6) <input type="checkbox"/> Other: |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2-8 and 10-12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 2 and 3, the claim, as currently drafted, contains the following language: "wherein **when** using two or more steel cord reinforcing layers". It is obvious that the claim is directed to only one, hypothetical embodiment and only requires the specified configuration **when** two or more steel cord reinforcing layers are included. Therefore, the claim does not require the specified design in prior art embodiments having only a single steel reinforcing cord layer. It is unclear if applicant intended the claim to read as previously indicated or if applicant intended the claim to describe a specific design in which two steel cord reinforcing layers were employed.

With respect to claim 4, applicant has included a "method limitation" in attempting to further limit the pneumatic tire structure defined in claim 1. It is unclear how this claim further defines the structural makeup of the independent claim (i.e. no further **structural limitation** with respect to wind contact part). Therefore, since the claim is directed toward the manner of forming the wind contact part, it is evident that all the structural limitations defined in claim 4 are defined in independent claim 1.

With respect to claims 5-7 and 10-12, the language "the steel cord reinforcing layer" appears. In each instance, there is insufficient antecedent basis for this limitation in the claims. The independent claim (claim 1) refers to the reinforcement as having "at least one steel cord reinforcing layer". Therefore, it is suggested that this language be included in each of the aforementioned claims to provide consistency throughout the claims. For example, claim 5 should be amended as follows: --wherein the steel cords constituting the at least one steel cord reinforcing layer--.

Regarding claims 5 and 6, applicant has described a "flare having a scattering width" as defining a diameter that ranges between 1.0-1.5 times the cord diameter, as depicted in Figure 7. Therefore, this definition suggests that a cord having no change in diameter defines a "flare" characteristic, since the lower range is 1.0 times the diameter. Thus, the range defined for the "flare" characteristic adds confusion to what applicant intended this feature to incorporate. It is suggested that applicant clarify the scope of said feature to clearly define the inclusion or elimination of an embodiment in which the cord diameter does not change.

Regarding claim 6, applicant describes a distance between cords that ranges from 1.00 – 1.50 millimeters. As currently drafted, it is unclear exactly what dimension or distance the claim is defining (i.e. center-to-center or cord end to cord end). It is the examiner's position that the dimension is defining the distance between cord ends and not the center-to-center distance. As such, this definition will be applied for examination purposes.

With respect to claim 7, the language “Z-lay outer-sheath structure” appears. This feature has not been adequately defined to provide a clear and concise understanding of the claimed invention. The disclosure simply states that a Z-lay outer-sheath structure is preferred over an S-lay outer-sheath structure to eliminate the propagation of cracks (Page 13, Lines 23-28). It is unclear if the applicant is describing a twist characteristic in the outer sheath layer or some additional feature. It is suggested that applicant clearly define what an S and Z outer-sheath layer structure constitute.

Regarding claim 8, applicant has attempted to define two distances as follows:

- (a) between a line (n) and a start end of the at least one steel cord reinforcing layer and
- (b) between a vertical line (m) drawn from an outermost end position of the bead core in the radial direction to the outer face of the bead portion and the normal line (n). In describing the line “n”, the claim states that a “normal line (n) drawn at a first rim line position to an outer face of the bead portion in the radial direction”. As depicted in Figure 8, however, line “n” does not correspond to this definition. It appears that in fact line (m), and not line (n), intersects the axially outer surface of the tire at the “first rim line position”, as defined in the specification (Column 5, Lines 13-16). Therefore, it is unclear where line (n) is located with respect to the start end of the at least one steel cord reinforcing layer. Furthermore, the description of line (m) as a “vertical line” does not correspond with the depiction of said line as being the normal line from the radially outermost point of the bead core to the outer face of the bead portion. It is suggested that applicant clearly describe how lines (n) and (m), respectively, are defined.

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3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 7 and 8 rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claim 7, as mentioned in the 112, 2nd paragraph rejection above, it is unclear exactly what a "Z-lay outer-sheath structure" defines. The specification only suggests that a "Z-lay outer-sheath structure" is preferred over an "S-lay outer-sheath structure" to eliminate the propagation of cracks. Thus, the disclosure does not contain an adequate description as to what a "Z-lay outer-sheath structure" is or how it is formed.

Regarding claim 8, applicant has attempted to define two, distinct references: line (n) and line (m). In defining line (n), the disclosure states that the line is drawn at a first rim line position to an outer face of the bead portion in the radial direction. First, the first rim line position occurs at the contact point of the tire and the rim **at the outer face of the bead portion in the radial direction** so it is unclear how line (n) can be defined as going from a first rim line position to an outer face of the bead portion. Second, it appears that line (m), and not line (n), is drawn such that it has a contact point with the outer face of the bead portion at the first rim line position. As such, the exact location of line (n) cannot be determined in any manner from the disclosure as currently drafted.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 4, and 11 rejected under 35 U.S.C. 102(e) as being anticipated by Ahouanto et al. (US 5,961,756). As best depicted in Figure 5, Ahouanto et al. is directed toward the manufacture of pneumatic tires having a pair of sidewall portions, a pair of bead portions, and a carcass toroidally extending between a pair of bead cores (described as annular element) and comprised of at least one rubberized carcass ply, such that the at least one carcass ply is wound around the bead core from an inside of the tire toward an outside thereof in a radial direction. The reference also depicts the inclusion of at least one reinforcing ply (8-1, 9-1) in the bead portion of the tire. In describing both the carcass plies and the at least one cord reinforcing layer, Ahouanto et al. suggest the use of a general "cord" and specifically state the use of metal, and more preferably steel (Column 3, Lines 31-43 and Column 4, Lines 61-64).

Regarding claim 4, as mentioned in the 112, 2nd paragraph rejection above, applicant has included a method limitation in attempting to further limit the structural makeup of a tire structure. In any event, though Ahouanto et al. are silent with respect to the aforementioned method, the formation of a bead structure in which the carcass turnup is securely contacted with the peripheral surface of the bead core (result of

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plastic deformation in at least one corner) would have been a desirable characteristic to ensure optimum reinforcement in the bead portion.

With respect to claim 11, Ahouanto et al. depict the inclusion of a decoupling rubber (11) or a cushion rubber layer between the main body of the carcass ply and the start end portion of the at least one steel cord reinforcing layer (Figure 5).

Claim Rejections - 35 USC § 102 / 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 1-4, 9, and 10 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Okuni et al. (US 4,706,725). As best depicted in Figure 4, Okuni et al. is directed toward the manufacture of pneumatic tires having a pair of sidewall portions, a pair of bead portions, and a carcass toroidally extending between a pair of bead cores and comprised of at least one rubberized carcass ply, such that the at least one carcass ply is wound around the bead core from an inside of the tire toward an outside thereof in a radial direction. Additionally, the reference employs a steel reinforcing layer (11) adjacent to the turnup portion in the bead region of the tire (Column 4, Lines 51-56). With respect to the cords of the at least one carcass ply, Okuni et al. describe the use of organic fibers, such as nylon, rayon, polyester, or the like. However, the reference also indicates that, in general, it is known

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that a radial tire comprises one or a few carcass plies each containing fiber or metal cords (Column 1, Lines 9-11). Thus, it is evident that the organic fiber cords suggested by Okuni et al. are exemplary. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to construct the carcass out of conventional, steel cords as they are used in a variety of tires due to their high modulus property and ability to provide adequate reinforcement.

With respect to claims 2 and 3, as mentioned in the 112, 2nd paragraph rejection above, the claim is only directed toward embodiments in which two or more steel cord reinforcing layers are included. Okuni et al., in accordance to the limitations of claim 1, suggest the use of at least one steel cord reinforcing layer, depicting an embodiment in Figure 4 having only one steel cord reinforcing layer. As such, the limitations outlined by applicant in claim 2 are not required in the design of Okuni et al.

Regarding claim 4, in an analogous manner to that set forth in paragraph 4, the formation of a bead structure in which the carcass turnup is securely contacted with the peripheral surface of the bead core would have been a desirable characteristic to ensure optimum reinforcement in the bead portion.

Regarding claim 9, Okuni et al. suggest the use of a chafer (10) arranged on the outside of the steel reinforcing cord layer and composed of fiber cords or woven fabric (Column 4, Lines 45-47). Furthermore, it is evident from Figure 4 that the chafer covers the terminal end of the steel cord reinforcing layer. It is noted that applicant has defined the start end of the carcass ply as being located at a side of a main body of the carcass ply. Therefore, the start end of the steel cord reinforcing layer in Okuni et al. is in close

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proximity to the shoulder region of the tire, while the terminal end of said layer is in the bead portion of the tire.

With respect to claim 10, Okuni et al. only describe the chafer as being composed of fiber cords or a woven fabric. Though the reference is silent with respect to the cord angle of the cords in the chafer, one of ordinary skill in the art at the time of the invention would have readily appreciated and expected the cords of the chafer to be arranged within the broad range of 15°-75° with respect to an arranging direction of the steel cords constituting the at least one steel cord reinforcing layer. Also, Okuni et al., describe the angle of the cords in the at least one steel cord reinforcing layer as being between 15°-30°. Therefore, one would have expected the cords in the adjacent chafer strip to be inclined at a similar magnitude but in the opposite direction (crossed layers), suggesting an approximate angle difference of 30°-60°.

Claim Rejections - 35 USC § 103

9. Claims 1 and 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Kenpu (JP 08040023) in view of either one of Okuni et al. or Ahouanto et al. Kenpu teaches the manufacture of pneumatic tires having a general tire construction, including a pair of sidewalls, a pair of bead portions, and a carcass toroidally extending between a pair of bead cores. In describing the carcass, Kenpu clearly depicts a wind contact part along the peripheral surface of the bead core such that it is sandwiched between said surface of the bead core and a fixing ring-shaped body (7) (Figure 1). However, Kenpu is silent with respect to the use of at least one steel cord reinforcing layer. In any event, steel cord reinforcing layers are conventionally used to reinforce the bead portion

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in a variety of tires. For example, Okuni et al. (Figure 4) and Ahouanto et al. (Figure 5) clearly suggest the use of steel cord reinforcing layers in similar carcass constructions having a wound contact part. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to employ at least one conventional steel cord reinforcing layer, as suggested by either Okuni et al. or Ahouanto et al., in the general tire construction of Kenpu, as set forth below.

As best illustrated in Figure 1 of Kenpu, the reference contains all the limitations of the claimed invention with the exception of at least one steel cord reinforcing layer. In any event, steel cord reinforcing layers are conventionally employed in the bead portion of a variety of tires. For example, Okuni et al. and Ahouanto et al. clearly suggest the use of steel cord reinforcing layers in tires having a similar wound contact part. The use of such conventional reinforcing layers provides adequate rigidity and protection in the bead portion of the tire.

Regarding claim 4, in an analogous manner to that set forth in paragraph 4, the formation of a bead structure in which the carcass turnup is securely contacted with the peripheral surface of the bead core would have been a desirable characteristic to ensure optimum reinforcement in the bead portion.

10. Claims 5 and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over either one of Ahouanto et al., Okuni et al., or Kenpu, as applied to claim 1 above, and further in view of Kobayashi et al. (US 5,261,476). As described above, each of the aforementioned references provides a teaching that describes the manufacture of pneumatic tires having a general tire construction and additionally, a carcass ply that is

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wound around the peripheral face of the bead core. Furthermore, the references incorporate at least one steel cord reinforcing layer to provide adequate protection in the bead portion of the tire. In each instance, however, the references are silent with respect to the cord diameter and the spacing in said reinforcing layer. In any event, the range of 1.0-1.5 millimeters for the cord diameter and cord spacing is conventionally used in similar reinforcing plies. For example, Kobayashi et al. (Figure 1) describe the use of an outer reinforcing ply (10) having steel reinforcement in which the cord diameter is approximately 1.1 millimeters (Column 5, Lines 54-55). Though the cord spacing is not addressed, one of ordinary skill in the art at the time of the invention would have readily appreciated and expected the cord spacing to be approximately equal to the cord diameter (~1.1 mm). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to employ a steel cord reinforcing layer, as described by Kobayashi et al., in the general tire construction defined by either one of Ahouanto et al., Okuni et al., or Kenpu, as set forth below.

With respect to claims 5 and 6, as described above, Ahouanto et al., Okuni et al., and Kenpu all describe a tire configuration in accordance to the limitations of the claimed invention, including the use of at least one steel cord reinforcing layer. Though the aforementioned references are silent with respect to the cord diameter and cord spacing, the range of 1.00-1.50 mm for each parameter is conventional in the tire industry. For example, Kobayashi et al. describe a tire having a similar steel cord reinforcing layer (10) in which the cord diameter is 1.1 millimeters. Though Kobayashi et al. is silent with respect to the cord spacing, it is well known in the tire industry that

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the cord spacing is approximately equal to the cord diameter, unless otherwise specified. Thus, Kobayashi et al. represent one example of a conventional design in which the steel cords in a bead portion reinforcing layer have a cord diameter and cord spacing between 1.0 and 1.5 millimeters. It should lastly be noted that applicant has included a limitation in claim 5 that suggests a "flare" characteristic in which the free end of the steel cord has a width that ranges between 1.0-1.5 times the cord diameter. As described in the 112, 2nd paragraph rejection above, this limitation includes cords having the same diameter throughout the length of the cord.

11. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Kenpu and Okuni et al. as applied to claim 1 above, and further in view of Kadota et al. (US 4,846,238). As mentioned in the rejection of claim 1 above by Kenpu, Figure 1 clearly depicts the general construction of the claimed invention, including a carcass turnup portion that contacts the peripheral surface of the bead core. Furthermore, it was suggested that Okuni et al. teach the use of a conventional steel cord reinforcing layer in accordance to the limitations of the claimed invention. However, Kenpu is silent with respect to the use of an organic fiber chafer. In any event, the use of a bead reinforcing assembly composed of at least one steel cord reinforcing layer and at least one organic fiber chafer is extremely well known and conventional in the tire industry. For example, Okuni et al. (Figure 4) and Kadota et al. (Figure 4) clearly suggest that this assembly is conventionally used to reinforce the bead portion in a variety of tires. As such, it would have been obvious to one of ordinary skill in the art at the time of the invention to employ a bead reinforcing assembly composed of at least one steel cord reinforcing

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layer and at least one organic fiber chafer, as described by either Okuni et al. or Kadota et al., in the general tire construction outlined by Kenpu, as set forth below.

As previously mentioned, Kenpu clearly depicts the specifics of the claimed invention in Figure 1, including the claimed carcass configuration. Though Kenpu is silent with respect to additional reinforcing elements, the use of a bead reinforcing assembly composed of at least one steel cord reinforcing layer and at least one organic fiber chafer is extremely well known and conventional in the tire industry. For example, Okuni et al. and Kadota employ similar reinforcing structures having both a steel cord reinforcing layer and an organic fiber chafer. These references further illustrate the use of such an assembly when the carcass is simply turned up (Kadota et al.) or when the carcass contacts the peripheral surface of the bead core (Okuni et al.). Thus, it is evident that such reinforcing assemblies are conventionally employed to provide adequate rigidity and protection to the bead portion of the tire. Therefore, one of ordinary skill in the art at the time of the invention would have found it obvious to select the claimed bead reinforcing assembly due to its conventional use and aforementioned benefits.

12. Claim 9 rejected under 35 U.S.C. 103(a) as being unpatentable over Ahouanto et al. as applied to claim 1 above, and further in view of Okuni et al. and Kadota et al. As previously mentioned, Ahouanto et al. describe the manufacture of pneumatic tires having a general tire construction in accordance to the limitations of the claimed invention. Furthermore, the reference clearly depicts in Figure 5 the use of two bead portion reinforcing layers (8-1 and 9-1). In describing these layers, Ahouanto et al. state

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that either of the reinforcing plies can be composed of steel, an organic polymer, or an inorganic polymer material (Column 3, Lines 36-43). However, the reference is silent with respect to a specific embodiment in which one layer is composed of steel cords and one layer is composed of organic fiber cords. In any event, it is clear that the reference provides a variety of combinations for the two reinforcing plies and one of ordinary skill in the art at the time of the invention would have readily appreciated a reinforcing assembly composed of one steel cord layer and one organic fiber cord layer. This specific assembly is conventionally used in a variety of tires, as evidenced by either one of Okuni et al. or Kadota et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to employ a conventional reinforcing assembly composed of one steel cord reinforcing layer and one organic fiber cord layer, as suggested by either Okuni et al. or Kadota et al., in the general tire construction of Ahouanto et al., as set forth below.

Ahouanto et al. clearly depict (Figure 5) a general tire design incorporating a carcass turnup portion that contacts the peripheral surface of the bead core. Furthermore, the reference suggests that two reinforcing layers (8-1, 9-1) are arranged in the bead portion of the tire. In describing these reinforcing layers, Ahouanto et al. suggest that a variety of cord materials, including steel and organic fibers, can be used to construct the aforementioned reinforcing layers (Column 3, Lines 36-43). It should be initially noted that the reference is completely silent to any specific combination, generically stating that a variety of cord materials can be used. Though the specific assembly composed of one steel cord reinforcing layer and one organic fiber layer is not

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disclosed, such an assembly is conventionally used in a variety of tires to provide adequate protection in the bead portion of the tire. For example, Okuni et al. and Kadota et al. depict a conventional bead reinforcing assembly having a steel cord reinforcing layer and an organic fiber cord reinforcing layer to provide adequate reinforcement. Therefore, one of ordinary skill in the art at the time of the invention would have found it obvious to select the claimed bead reinforcing assembly due to its conventional use and aforementioned benefits.

13. Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Ahouanto et al., as applied to claim 11 above. As described above, the reference suggests all the limitations of the claimed invention, including a cushion rubber layer between the main body of the carcass ply and the start end portion of the at least one steel cord reinforcing layer. However, Ahouanto et al. do not provide a range for the thickness of the cushion rubber layer. The reference, though, does describe the rubber thickness in one embodiment and suggests a thickness of 0.8 millimeters (Column 6, Lines 63-64). Since the thickness of the single embodiment in Ahouanto et al. is quite close to the range defined by applicant, it is the examiner's position that the range of 1.5-2.0 millimeters would have been readily appreciated by one of ordinary skill in the art at the time of the invention. It is evident that the thickness of 0.8 millimeters is exemplary and one of ordinary skill in the art at the time of the invention would have been able to optimize the reinforcement in the region of the start end of the at least one steel cord reinforcing layer by using more than one thickness (i.e. a range of similar values). Thus, the proximity of the single embodiment and the defined range suggests that

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values within the range would have been selected by the skilled artisan to provide adequate reinforcement.

Conclusion

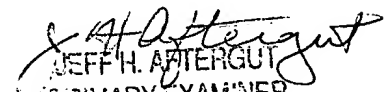
14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Kujiwara et al. (US 5,431,209), Lamock (WO 99/48708), Kiyoshi (JP 09156310), and Koji (US 11321244). In each instance, the aforementioned references describe a general tire construction, including a carcass turnup design in which the peripheral surface of the bead portion is contacted by said turnup portion.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R Fischer** whose telephone number is **(703) 605-4397**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Justin Fischer


JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300

November 15, 2001